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A Balanced Approach to Private Equity

The Economic Value of Terms & Conditions *What is Worth Fighting For?*

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ABSTRACT

Limited partners investing in private equity funds often negotiate partnership terms and conditions without a clear understanding of the relative value of each individual decision. Possessing such knowledge would allow the limited partner to decide which terms may be used as bargaining chips and which are most worth fighting for. In this paper we quantify the effect on net returns of some of the most common terms used in the private equity industry. Our analysis has revealed some interesting and counterintuitive results. Although compensation for general partners is generous compared to more efficient asset classes; under typical industry terms and conditions, the expected fees paid to GPs total \$71 million over the life of a \$100 million fund, we find that over many years partnership terms have evolved in favor of LPs from their starting point.



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INTRODUCTION

A common sentiment among institutional investors in private equity holds that “good terms cannot make a bad investment good and bad terms cannot make a good investment bad.” The spirit of the sentiment is correct; choosing partnerships based solely on terms and conditions is allowing the tail to wag the dog. However, many institutional investors could benefit from having a better knowledge of the effects of individual terms and conditions on net returns. Possessing this knowledge would allow the limited partner to decide which terms may be used as bargaining chips and which are most worth fighting for.

In this paper we quantify the impact on net returns of some of the most common terms used in the private equity industry. We project the cash flows of a representative private equity fund over its entire life and observe its performance from the perspective of a limited partner. We introduce uncertainty by making portfolio company returns a random variable, which has the advantage of allowing us to measure the value of terms that are time-path dependent, such as the clawback. Then we systematically run multiple scenarios and by changing one term at a time isolate the expected economic value of that particular term or condition to a limited partnership investor.

This paper is organized into four parts. The first part discusses the terms and conditions analyzed and describes our “Base Case” scenario, which reflects current industry standard terms for private equity partnerships. The second part develops our representative private equity fund model. The third part of this paper discusses the results of our expected economic value of terms and conditions analysis. The fourth part summarizes our conclusions.

TERMS ANALYZED

We modeled 27 parameters to capture two kinds of fees: management fees and performance based fees (carried interest). In general the management fees were calculated and paid at the beginning of the period based on commitments or net invested capital. Performance based fees were calculated as a proportion of gross distributions made by the fund in a given period and paid at the end of the period.

Management Fees

Management fees were modeled as a function of total commitment amount or of net invested capital as of a point in time (or some combination of both). Net invested



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capital for each portfolio company at each point in time was a function of cumulative invested capital and distributions. Each investment increased net invested capital dollar-for-dollar. Each distribution was composed of two parts: return of capital and return on capital. Each return of capital reduced net invested capital dollar-for-dollar. We applied average cost accounting to differentiate between return of capital and return on capital. In general, net invested capital (NIC_t) can be expressed as a function of investments (INV_t), distributions ($DIST_t$), and net asset values (NAV_t) as follows:

$$NIC_t = NIC_{t-1} + INV_t - DIST_t \times \frac{NIC_{t-1}}{NAV_{t-1}}$$

For our Base Case terms scenario, which reflects current common industry terms, we applied a commitment-based management fee of 2% per year for the first five years (the investment period). After the fifth year we reduced the fee by 20 basis points per year through the tenth year. After the tenth year the management fee stopped altogether.

Performance-Based Fees

Performance-based fees were modeled as a function of total profits. In spirit, the general partners (GPs) receive, in the form of carried interest, some proportion of every dollar of profit distributed by the fund as an incentive to maximize total distributions. However, because the limited partners (LPs) have provided the majority of the capital invested, there may be some priority distributions received by the LPs prior to the GPs receiving any distributions. These priority distributions to LPs may include a return of capital, a return of management fees paid, and/or sufficient distributions to meet some pre-specified return on capital, called the preferred return. Preferred returns can be calculated in a variety of ways. For example, valuations may be included or excluded altogether (cash-on-cash returns) and management fees paid may be included the invested capital base or not. We measured the preferred return as the internal rate of return on the investment, based on distributions received by the LPs and residual portfolio value, as of the current period.

Once the required return of capital and the preferred return have been met, there are a variety of ways subsequent distributions can be divided among the LPs and GPs. Oftentimes the GPs specify a catch-up provision whereby they receive an accelerated proportion of all distributions until they have “caught-up” to the LPs and received the proportion of total distributions specified by the profit-split. Also becoming more common is the LP clawback provision, which requires the GPs, at the end of the fund’s life, to return to the LPs any distributions they have received in excess of their allotted



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proportion. A clawback provision may be triggered in the event of high returns early in the fund's life followed by low returns later.

For our Base Case scenario, which was meant to reflect industry-standard terms and conditions, we considered a carried interest of 20% of profits based on distributions aggregated across portfolio companies. The fund was required to return all invested capital and management fees paid prior to the GP receiving distributions. The preferred return was set to 8%, calculated including fees and valuations. We also included a catch-up provision that provided the GPs 80% of all distributions made after the preferred return was reached until the GPs had received a full 20% of all distributions. At the termination of the fund, our clawback provision provided the LPs a minimum of 80% of all distributions or their invested capital and fees, whichever was greater, prior to the GPs being entitled to any distributions. For reference, Exhibit 1 summarizes the terms utilized in our Base Case scenario.

Exhibit 1: Base Case Terms & Conditions

Fund Size:	\$100 million.
Term:	10 years with up to two additional two-year extensions.
Investment Period:	Five years.
Management Fee:	2% of committed capital paid in advance during the investment period, rate decreases by .20% per year until the tenth year, and then ceasing.
Distributions:	<p>Distributions will be made in the following order of priority and amounts:</p> <ul style="list-style-type: none"> (i) First 100% to the Limited Partners until they have received an amount equal to their invested capital plus management fees paid; (ii) Then 100% to the Limited Partners until their net internal rate of return, including management fees paid and the fund's current valuation, has reached the Preferred Return; (iii) Then 80% to the General Partners and 20% to the Limited Partners until the General Partners have received 20% of all profits distributed in excess of (i); (iv) Then 80% to the Limited Partners and 20% to the General Partners.
Preferred Return:	8% based on invested capital net of management fees.
Clawback	Upon termination of the fund, the General Partners will be required to restore funds to the Limited Partners if the Limited Partners have failed to receive the greater of (a) their total invested capital plus management fees paid and (b) 80% of all profits distributed. Under no circumstances will the clawback amount exceed the amount of total distributions received by the General Partners.



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THE FUND MODEL

We projected the experience of a typical private equity fund over its life to measure the impact on net returns of various combinations of terms and conditions. The fund model was based upon an aggregated composite of 94 liquidated funds from the Venture Economics database. Although the database holds a total of 351 liquidated funds, we included in our sample only those that consistently reported valuations over their history. We also excluded so-called “evergreen funds” with capital recycling provisions because today those funds are not typical. The fund model was estimated by fund age rather than calendar year to capture the lifecycle of a typical fund.

The fund model has two deterministic parameters that were estimated empirically from our liquidated fund data sample. The first parameter is fund investments for each period (INV_t). Investments were defined as the investment rate in the current period (i_t) multiplied by the fund’s total commitments (C). The investment rate for each period was estimated using the average historical investment per dollar committed across all funds in the sample. Historically the funds in our sample have drawn-down a total of \$96 per \$100 committed, which is reflected in our fund model. For the purposes of this paper we assumed the model fund had total commitments of \$100 million, although the scale of the fund does not influence our results.

$$INV_t = i_t \times C$$

The second parameter in the fund model is fund distributions for each period ($DIST_t$). Distributions were defined as the distribution rate in the current period (d_t) multiplied by the previous period’s net asset value (NAV_{t-1}). The distribution rate for each period was also estimated by averaging the historical ratio of current period distributions to previous period net asset values across all of the funds in our data sample.

$$DIST_t = d_t \times NAV_{t-1}$$

The fund model’s final piece, net asset value, was built up from the investments and distributions, as well as from an assumption for the portfolio’s growth rate (r). Net asset value (NAV_t) was specified as follows:

$$NAV_t = NAV_{t-1} \times (1 + r) + INV_t - DIST_t$$

One aspect of this specification of the fund model is that overall fund’s internal rate of return (IRR) at any point in time, and most importantly upon liquidation, will equal the return assumption (r).

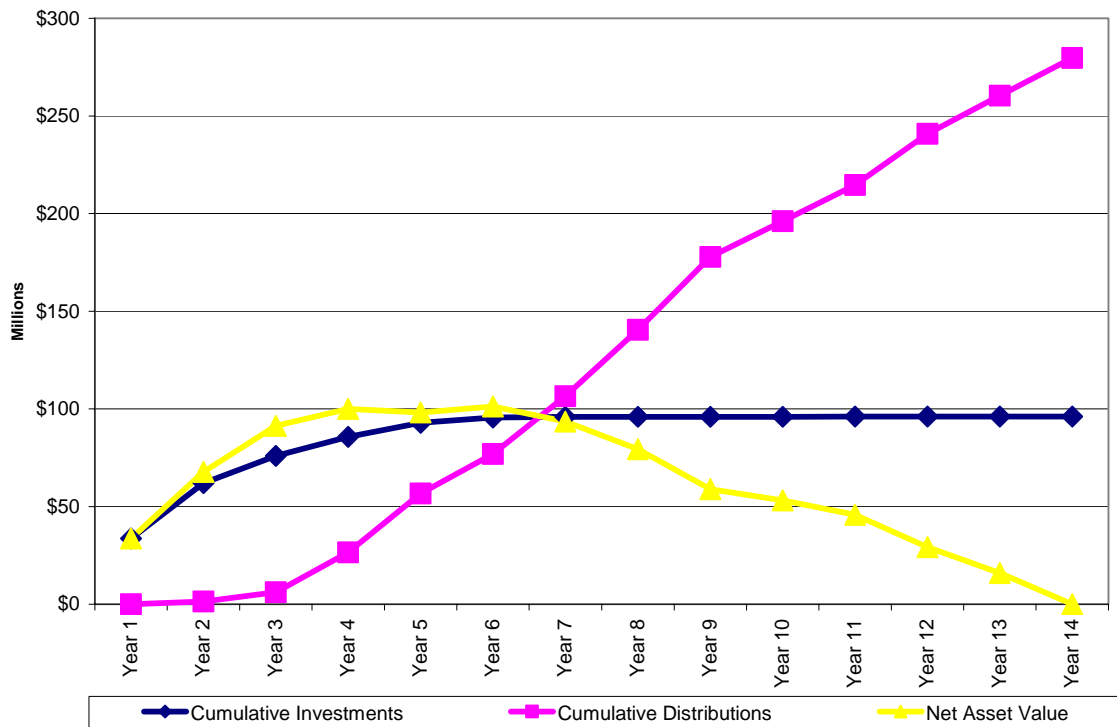


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We estimated the private equity return (r) using the historical internal rate of return of a cash flow pooled composite of all funds in our data set, which was 16.2%. Since the Venture Economics data is reported net of all fees, we chose r to be 21.3%, which is the gross fund return that results in a net return of 16.2% under our Base Case fee assumptions. For this model fund the expected times money earned ratio over the life of the fund is 2.9 gross of all fees. We performed sensitivity analysis by using a range of deterministic values for r and by making r a random variable, as described in the following section of this paper. Exhibit 2 shows a graphical depiction of our typical model fund's investments, distributions, and net asset value by year, based on the gross return assumption of 21.3%.

Exhibit 2: Fund Model: Gross Investments, Distributions, and Net Asset Value (\$100 million commitment)



RESULTS

Our terms and conditions analysis was divided into two parts. The first part was meant to assess the general detriment to net returns of fees, using industry-standard



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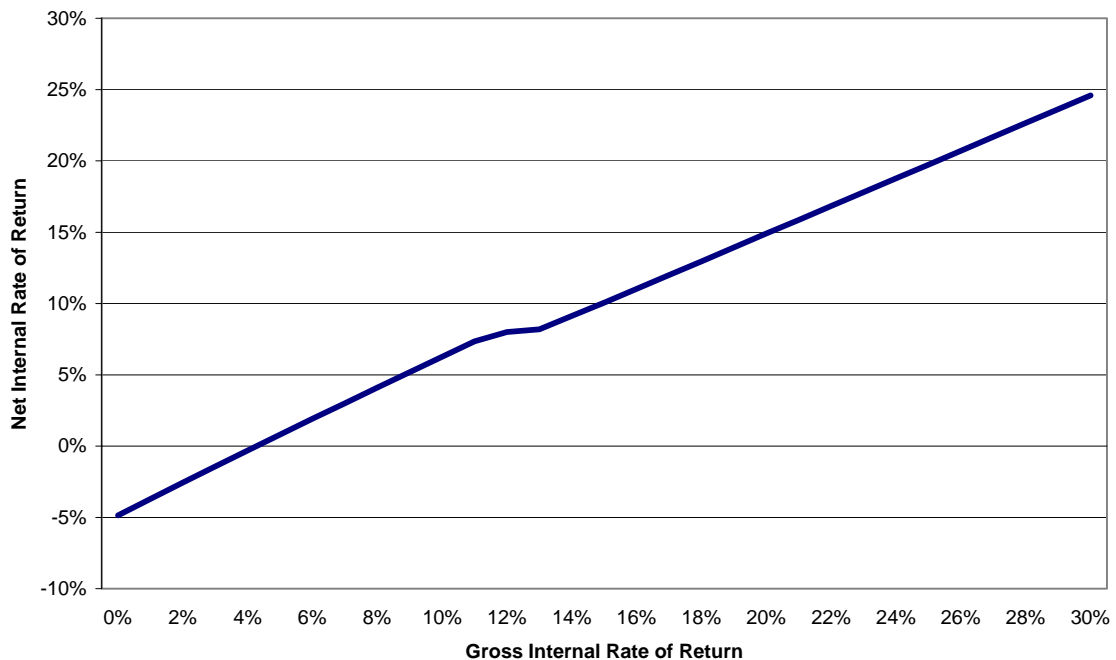
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terms as a starting point. The second part of the analysis was designed to measure the expected economic value of each term. To do this we simulated 10,000 private equity funds, each of which conformed to the fund model described above. Each simulated fund held ten portfolio companies over seven to fourteen years. In each year, for each fund, and for each portfolio company we generated a stochastic return. Doing so allowed us to produce an expected distribution of net fund returns for a given set of terms. By repeating this experiment under different sets of terms and conditions, we were able to estimate the economic value of each individual term.

As described above, our gross return assumption of 21.3% was designed to yield a net return of 16.2%. The \$100 million model fund, under our Base Case terms scenario (with r a constant over time), distributed a total of \$213 million to the LPs over the fourteen-year period, for a times-money earned (TME) ratio of 2.2, net of all fees. Total management fees paid were \$17 million, and total carried interest paid to the GPs was \$29 million. The total distributions of \$242 million (\$213 million to LPs, \$29 million to GPs) consisted of \$96 million in invested capital and \$146 million in distributed profits.

It is instructive to study the translation of gross into net returns at different levels of absolute return. Exhibit 3 is a line graph of the expected net return associated with each level of gross return from 0% to 30% under our Base Case terms scenario.

Exhibit 3: Net Return as a Function of Gross Return Under Base Case Terms & Conditions





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Perhaps the most important point regarding the net return line is its left endpoint. A gross return of zero corresponds to a net return of -4.9%. This provides an indication of the return-drag associated with partnership management fees. The annualized return degradation is considerably more than the 2% face value of the fee because dollars paid to management fees are never invested and compounded, which increases their opportunity cost.

The most obvious feature of Exhibit 3 is the flat spot that interrupts the line's upward slope. That plateau is a direct effect of the catch-up provision. The line kinks above net return of 8% (and corresponding gross return of 12%), which is the preferred return in our Base Case scenario. A 1% increase in the gross return from 12% to 13% results in a 18 basis point increase in the net return because the GPs are receiving 80% of those distributions, per the catch-up. The segment of the line below a gross return of 12% (and corresponding net return of 8%) has a slope of 1.07, indicating that net returns are increasing faster than gross returns in this region. Because the IRR is less than the preferred return, the LPs receive 100% of the distributions at these levels of return. The slope of the line from gross returns of 12% to 13% is 0.18, as mentioned above, and above gross return of 13% is the slope of the line is 0.97. This indicates that net returns increase at nearly the same rate as gross returns after the catch-up provision has been covered, though net returns are 540 basis points lower than gross returns.

The analysis above is useful to see the impact of Base Case terms at different levels of returns. However, within each gross return scenario above there is a constant time-path of returns. In order to measure the expected economic value of individual terms it is necessary to examine multiple return paths to capture how the terms and conditions react to variability in returns over time and among portfolio companies. By making the growth rate r a stochastic parameter, we can project a distribution of fund outcomes with appropriate probabilities assigned to each outcome.

Using Monte Carlo simulation, we created 10,000 private equity funds, each of which invested in ten portfolio companies. The investments and distributions of each fund followed those of the fund model described above. However, in each period each portfolio company's return was a random variable. We modeled each r as an independent normal random variable with a mean of 21.3%, our gross return assumption as described above. We set the standard deviation of portfolio company returns (σ_r) so that the standard deviation of net IRRs from our 10,000 simulated funds would equal the historical cross-sectional standard deviation of the IRRs of funds in our liquidated funds data set (which are reported net of fees), which was 15.6%.

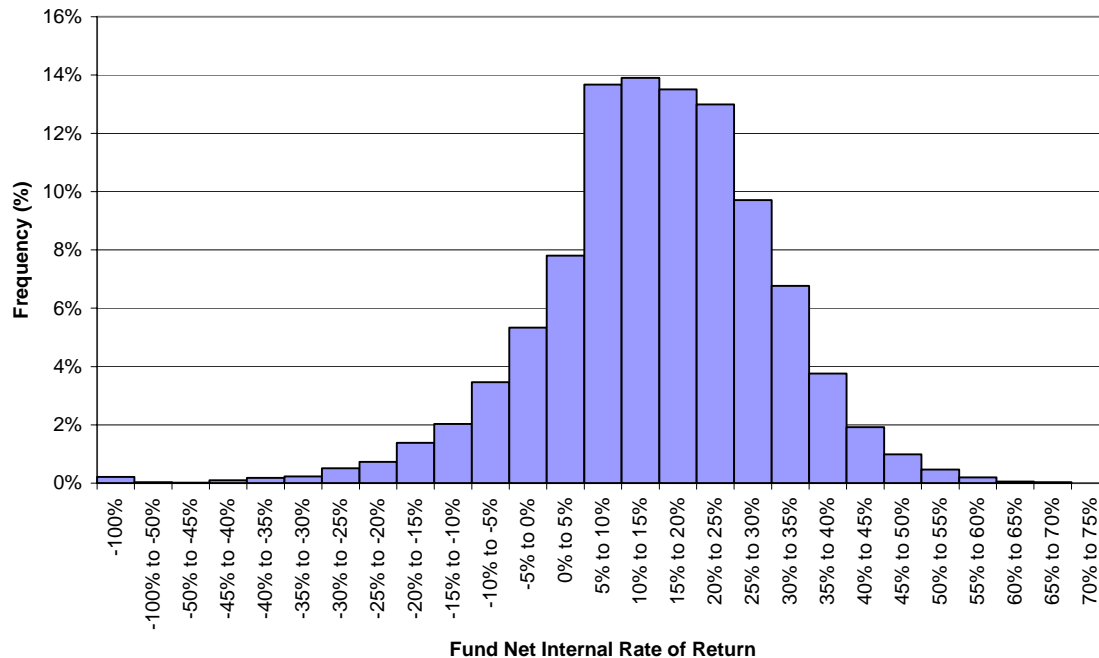
A histogram of the net IRRs of our 10,000 funds simulated under Base Case terms is shown in Exhibit 4.



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Exhibit 4: Histogram of Net IRRs Under Base Case Terms & Conditions



The mean net IRR of 14.6% from the stochastic simulation is lower than the result from our deterministic simulation above, which was 16.2%, and the mean total net distributions of \$311 million is greater than the deterministic result, which was \$213 million. This is attributable to the negative skew in the distribution of IRRs due to outcomes of -100% in some simulations and the positive skew in distributions due to compounding over time. The median net total distributions of \$192 million was closer to the deterministic result. Other than the occurrences of -100% and the cluster of returns in the 5% to 10% bucket, explained by the fact that the preferred return lies within that range, the net IRRs are quite close to being normally distributed.

In addition to the Base Case terms, which served as our benchmark, we ran 22 more simulations, each under different terms and conditions. By comparing the expected total distributions under each alternative set of terms to expected total distributions under our Base Case scenario, we were able to quantify the expected marginal value of each term we tested. The paragraphs below contain a brief description and the expected economic value of each of each term. The economic values are also summarized in Exhibit 5.



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Exhibit 5: Summary of Economic Value of Terms & Conditions

	Expected Net IRR	Expected Distributions (\$ millions) to LPs	Expected Carry Paid (\$ millions) to GPs	Economic Value of Term (\$ millions)	Change in IRR vs Base Case (Basis Points)	Median IRR	Median Distributions (\$ millions) to LPs	Median Carry Paid (\$ millions) to GPs
Base Case	14.6%	311.1	53.9			15.2%	192.4	24.0
Net Invested Capital-based Fee after Investment Period	15.3%	317.8	55.4	6.7	71	15.6%	198.6	25.6
No Aggregation	13.6%	304.9	60.1	-6.2	-107	14.3%	186.4	29.9
No Aggregation, No Preferred, No Clawback	11.0%	292.0	73.0	-19.1	-368	11.9%	173.2	43.3
10% Carry	15.5%	338.0	27.0	26.9	91	16.2%	204.5	12.0
30% Carry	13.7%	284.3	80.7	-26.8	-97	14.0%	180.4	36.0
Remove Preferred Return	14.6%	310.6	54.4	-0.5	-8	15.2%	192.4	24.1
6% Preferred Return	14.6%	310.8	54.2	-0.3	-5	15.2%	192.4	24.1
10% Preferred Return	14.7%	311.6	53.4	0.5	6	15.2%	192.4	24.0
No Return of Capital or Fees Before Paying Carry	13.6%	310.9	54.1	-0.2	-103	13.8%	192.4	24.0
Return of Capital but not Fees Before Paying Carry	14.5%	311.1	53.9	0.0	-12	15.0%	192.4	24.0
Calculate Preferred Return on Cash Basis	14.7%	311.3	53.7	0.2	9	15.3%	192.4	23.9
Calculate Preferred on Investments Net of Management Fees	14.6%	310.6	54.4	-0.5	-8	15.2%	192.4	24.1
Remove Catch-Up	14.7%	311.5	53.5	0.4	5	15.2%	192.8	23.7
60% Catch-Up	14.6%	311.2	53.8	0.0	0	15.2%	192.4	24.0
100% Catch-Up	14.6%	311.1	53.9	0.0	0	15.2%	192.4	24.0
No Catch-up, No Preferred	14.6%	310.6	54.4	-0.5	-8	15.2%	192.4	24.1
No clawback	14.6%	311.1	53.9	0.0	0	15.2%	192.4	24.1
No Clawback, No Return of Capital or Fees Before Paying Carry	13.2%	301.6	63.4	-9.5	-146	13.3%	180.6	35.9
Simple 80/20 Split of Profits	11.0%	292.0	73.0	-19.1	-368	11.9%	173.2	43.3

Base Case terms resulted in mean total distributions to LPs of \$311 million and a mean net IRR of 14.6%. The total distributions of \$365 million (\$311 million to LPs, \$54 million to GPs) consisted of \$96 million in return of invested capital and \$269 million in distributed profits. On an expected basis, the GPs received 20% of the profits in our simulations. The expected (mean) total of management and performance fees paid to GPs under Base Case terms was \$71 million over the life of the \$100 million fund. Each terms scenario below is compared to the Base Case benchmark, with the economic value of each term presented as the difference in expected total distributions from the Base Case.

Net Invested Capital-based Management Fee

As an alternative to a step-down of the commitment-based management fee after the five-year investment period, as in the Base Case, we modeled a net invested capital-based management fee. The flat management fee of 2% of net invested capital for the rest of the fund's life actually reduced the total management fees payable to \$12.8 million from \$17 million. This difference in management fees translated into a 71 basis point increase in the expected net IRR to 15.3% and an increase in expected distributions



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of \$6.7 million. However, this increase presumes that funds formerly used to pay management fees (\$4.2 million) are fully invested into deals and compounded over the fund's life. If that amount simply goes undrawn the enhancement will be less.

Aggregation

Aggregation refers to the practice of calculating carried interest based on the sum of all portfolio company distributions. The alternative is to calculate carry independently for each portfolio company, which has the result of providing the GPs an option on portfolio company performance; essentially participating in the upside without any downside risk. Aggregation has the effect of placing the carry associated with successful investments at risk in the unsuccessful investments, better aligning the interests of the GPs with those of the LPs.

Our research has shown that aggregation in itself is a valuable term, but that overall the preferred return and clawback are more important than aggregation. Removing aggregation, while holding all other terms constant (keeping a preferred return, catch-up, and clawback on each individual deal) decreased expected distributions to the LPs by \$6.2 million and decreases the expected IRR by 107 basis points.

Lack of aggregation is more detrimental when it is indicative of less favorable terms overall. In reality, partnerships do not disaggregate portfolio companies and apply a hurdle rate to each. For this reason we analyzed another alternative scenario typical to terms in absence of aggregation: no aggregation, no preferred return, and no clawback. Under these terms total expected distributions were reduced by \$19.1 million and the IRR was 11%, a reduction of 368 basis points relative to the IRR under Base Case terms.

Although the practice of disaggregation itself has received much fanfare, these results show that the majority of the detriment associated with disaggregation is attributed to the absence of the preferred return and clawback provisions; not lack of aggregation itself. One aspect of the value of aggregation that cannot be quantified in this analysis is the psychological one. Aggregation removes some of the optionality of a GP's carry and therefore mitigates the GP's incentive to maximize volatility.

Carried Interest

The level of the GP's profit participation is often a point of debate. The best funds may charge higher than standard rate of carry. LPs would be well served to know whether the higher expected gross return associated with the "best" funds compensates them adequately on a net basis after paying higher carry. We tested a 10% carry



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scenario and a 30% carry scenario to estimate the effect of carried interest on net returns.

Carried interest influenced net returns the most of any one term in our analysis. A 10% carried interest produced an increase in expected distributions of \$26.9 million (and a 91 basis point rise in IRR). Likewise, a 30% carried interest reduced expected distributions by \$26.8 million (and dropped the IRR by 97 basis points). In this range a 10% change in the profit split resulted in an 8.7% change in expected net distributions. Also, in order to provide the same expected net distributions under a 30% carried interest, our model fund needed to attain a gross total return of 23%, 164 basis points greater than the same fund would need under a 20% carry.

Preferred Return

In addition to our Base Case preferred return of 8%, we also tested low (6%) and high (10%) preferred rates of return. The preferred return provides protection only in cases when the net return does not exceed the hurdle rate. In our stochastic model these outcomes and their probabilities are captured in the expected net return under each set of terms. Removing the preferred return altogether reduced expected distributions by \$503 thousand and reduced IRR by 8 basis points. The economic value of the preferred return is relatively small for two reasons. First, in cases where the fund outperforms the hurdle rate, the GP's catch-up provision re-aligns the total distribution of profits along an 80/20 split. And second, in cases where the fund underperforms the hurdle, the Return of Capital and Fees provision (detailed immediately below) ensures that the LPs receive all of their invested capital in cash prior to the GP receiving carry.

Changing the level of the preferred return has a predictable effect on net returns. Changing the preferred return by 2% resulted in a change in expected IRR of 5 to 6 basis points in the opposite direction. For the LP, reducing the preferred to 6% decreased expected distributions by \$297 thousand and increasing the preferred to 10% increased expected distributions by \$450 thousand.

Return of Capital and Fees

The provision in our Base Case that specifies return of all invested capital and fees prior to the GP receiving carry is not particularly significant. In our Base Case the preferred return and clawback provisions subsume this provision. Removing the return of capital and fees provision decreased expected distributions by only \$209 thousand (and decreased IRR by 103 basis points). Removing the return of fees (but not removing the return of capital) reduced expected distributions by a mere \$38 thousand (and decreased



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IRR by 12 basis points). This shows that the relatively more valuable term is the return of capital.

The value of these terms is that they are based on cash returns and therefore decelerate the collection of carry, changing the timing but not the magnitude of cash flows to the LPs. The clawback provision reverses any premature carry taken by the GPs at the end of the fund life.

Calculation of Preferred Return

Preferred returns are commonly calculated based on the return realized to-date, typically using the latest fund valuation as a terminal value (this is the case in our Base Case). One alternative scenario we tested was to calculate the fund IRR, for the purposes of determining whether the preferred return had been met, on a cash-only basis. The general effect is to postpone the GPs' receipt of carried interest (not lower it, as the presence of the catch-up would reverse such a situation) and remove the uncertainty the LPs have regarding whether portfolio value will ever be translated into distributions. The value of doing this is a relatively small \$170 thousand enhancement of expected distributions of our \$100 million fund, which corresponded to a 9 basis point increase in IRR. The effect is minimal because the timing but not the magnitude of cash flows is changed. This term is redundant in the presence of a catch-up and clawback.

Another possibility is to calculate the preferred return based on net invested capital, excluding management fees paid to the partnership. This reduces the invested capital base and lowers the gross return necessary to meet the preferred. This provision is essentially a way to reduce the preferred return, and reduces expected distributions by \$502 thousand, which corresponds to a 8 basis point reduction in IRR.

Catch-up

The catch-up provision ensures that the GPs receive carry on all distributions including those paid to reach the preferred return. A catch-up provision can render a preferred return relatively meaningless in the event that the fund outperforms the gross return necessary to satisfy the preferred. Removing the catch-up altogether increases expected return by a mere \$401 thousand or 5 basis points of IRR, suggesting a small economic value for this term.

Increasing or decreasing the proportion of distributions the GPs receive during the catch-up period serves to change the timing of distributions to the LPs but not the magnitude. Consequently, the value of the catch-up proportion, within a reasonable range, has little impact on net returns. A 60% catch-up increases expected distributions



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by \$30 thousand and a 100% catch-up decreases expected distributions by \$18 thousand relative to the 80% catch-up. Removing both the catch-up and preferred return reduced expected distributions by \$503 thousand (and reduced IRR by 8 basis points), suggesting that the preferred return is worth \$904 thousand in distributions in the absence of the catch-up.

Clawback

The clawback provides LPs recourse in the case when GPs get ahead of themselves and receive carried interest during the life of the fund in excess of their allotted proportion. This can occur when the preferred return appears to be met early in a fund's life based on valuations and the GPs receive an accelerated proportion of distributions in accordance to the catch-up, and later write-downs of valuations reveal that the preferred return was never actually met.

The clawback provision actually has no economic value in the presence of the Return of Capital and Fees Prior to Paying Carry provision. Without this provision in place, the clawback has quite significant economic value. Removing the clawback reduces expected net distributions by \$9.5 million and decreases expected IRR by 146 basis points, making it one of the most valuable terms in our analysis.

80/20 Split

Given the complexity of all of these terms and conditions, many of which have no doubt arisen in response to others, we have run a final scenario in which the distributions of profit are simply allocated as they are paid out, 80% to the limited partners and 20% to the general partners. This scenario resulted in decreased expected distributions to the LPs of \$19.1 million (and an expected IRR 368 basis points lower), suggesting that common industry terms and conditions have evolved to make limited partners substantially better off over time.

CONCLUSIONS

Limited partners investing in private equity funds often negotiate contract terms and conditions without a clear understanding of the relative value of each individual decision. In this paper we have quantified the economic value of common terms by



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projecting the expected distributions of net returns under different terms and conditions.

Our analysis has revealed some interesting and counterintuitive results. Under typical industry terms and conditions, the expected fees paid to GPs total \$71 million over the life of a \$100 million fund. Clawbacks have almost no economic value if GPs are required to return invested capital and fees prior to taking carried interest. That provision, or the clawback in the absence of that provision, is worth a substantial \$9.5 million in expected distributions over the life of the fund. Changing the level of a preferred return has little effect on net returns within a reasonable range. Relative to the amount of media attention it has received, aggregation of portfolio companies to compute carry, in itself, has less economic value than removing the preferred return and the clawback. Lack of aggregation is more a red flag that can indicate the presence of other, more abusive terms.

Calculating carried interest based on cash rather than valuations may mitigate a limited partner's sense of risk but has relatively little benefit (in terms of expected distributions) over a traditional calculation that includes valuations, and probably not worth fighting for. Catch-up provisions cost LPs an expected \$401 thousand, and are probably not worth fighting against. The level of carried interest was by far the most valuable term in our analysis. In our analysis, on average a \$100 million fund with 30% carry returned \$27 million less capital to investors than a fund with a 20% carry, holding returns constant. However, in order to fully compensate limited partners on a net basis for a 30% carry, general partners must increase their gross returns by only 1.6% per year. This suggests that LPs should overlook a higher than average carry if they can be certain they are choosing superior investments which will outperform by more than 164 basis points. Finally, we found that our Base Case, which was meant to reflect industry-standard terms and conditions, represented a very significant \$19 million improvement over a simple 80/20 split of all profits, suggesting that over many years terms have evolved in favor of LPs relative to their starting point.